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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Masahiko Sato

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EXAMINER

SCHUBERT, KEVIN R

ART UNIT

PAPER NUMBER

2137

DATE MAILED: 07/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/920,376

Applicant(s)

SATO ET AL.

Examiner

Kevin Schubert

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. <u>05112006</u> . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                    |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05192006</u> . | 6) <input type="checkbox"/> Other: _____.  |

Art Unit: 2137

### DETAILED ACTION

Claims 1-7,9-15, and 17 have been considered.

#### ***Continued Examination Under 37 CFR 1.114***

5           A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/19/06 has been entered.

10

#### ***Claim Objections***

Claim 3 is objected to because of the following informalities: the word "sshorten" is misspelled. Appropriate correction is required.

15

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

20

Claim 6 recites the limitation "the reception sensitivity". There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 112***

25

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Art Unit: 2137

Claims 3,6,11, and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5 In claim 3, for example, Applicant claims "preventing communication with an unintentional portable radio device by narrowing the coverage area of the two or more portable radio devices" (lines 14-15) and "wherein a transmission output of only a particular one of said portable radio devices is reduced" (lines 18-19). Such teaching appears to suggest a system in which when the two devices are brought together a first device must reduce only its reception sensitivity (and not its transmission output) and a  
10 second device must reduce only its transmission output (and not its reception sensitivity). Examiner submits that such teaching is not disclosed in the Specification. Appropriate correction or a specific reference as to where the above is disclosed in the Specification is required.

***Claim Rejections - 35 USC § 103***

15 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

20 (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25 Claims 1-2,4,7,9-10,12-13,15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nealon, U.S. Patent No. 5,463,659, in view of Leon, U.S. Patent No. 6,680,923, in further view of Executive Council (Executive Council. Fourteenth Session. 2-5 February 1999. pages 1,22).

30 As per claims 1,9, and 17, the applicant describes an authenticating method for portable radio devices, comprising data communicating means for performing radio communication over a first coverage

Art Unit: 2137

area and authentication means for performing authentication of said portable radio device over a second coverage area, comprising the following limitations which are met by Nealon, Leon, and Executive Council:

a) switching coverage area of two or more of said portable radio devices to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area (Nealon: Col 8, lines 23-34; Executive Council: page 22);

b) bringing the two or more portable radio devices to be mutually authenticated having the second coverage area being to within a proximity of one another so that the coverage areas of the two or more portable radio devices overlap (Nealon: Col 8, lines 23-34);

c) initiating mutual authentication by establishing communication between the two or more portable radio devices based only on the bringing of the two or more portable radio devices to within the proximity (Leon: Col 5, lines 58-64);

d) performing mutual authentication between the two or more portable radio devices by said authenticating means automatically when the coverage area of the two or more portable radio devices overlap (Leon: Col 5, lines 58-64; Nealon: Col 9, lines 3-25);

e) preventing communication with an unintentional portable radio device by narrowing the coverage area of two or more portable radio devices to be mutually authenticated before authentication initiates based on the proximity of the two or more portable radio devices (Nealon: Col 8, lines 23-34);

Nealon does not teach initiating **mutual authentication** based only on the bringing of two devices to within a proximity. In Nealon, it appears that only a single authentication technique takes place. Leon discloses the idea that when two devices are brought to within a predetermined vicinity, mutual authentication automatically executes. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Leon with those of Nealon for at least the reason that doing so makes the system more robust through authentication of both entities involved in the communication.

Nealon in view of Leon disclose communication between a portable device and a base station. Nealon and Leon, however, appear to be silent as to whether the base station is portable. Executive

Art Unit: 2137

Council discloses the idea that a radio base station may be portable. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Executive Council with those of Nealon in view of Leon because having a portable base station allows the base station to be more versatile as it can be moved around the room to provide the most efficient communication between  
5 itself and the portable device(s).

As per claims 2 and 10, the applicant describes the authenticating method for the portable radio devices according to claims 1 and 9, which are met by Nealon in view of Leon in further view of Executive Council, with the following limitation which is met by Nealon:

10       Wherein the step of performing the authentication by said authenticating means is performed in a state where a transmission output of said portable radio device is reduced to shorten a communication distance of said portable radio device (Nealon: Col 8, lines 23-34).

As per claims 4 and 12, the applicant describes the authenticating method of claims 2 and 10,  
15 which are met by Nealon in view of Leon in further view of Executive Council, with the following limitation which is met by Cotton:

Wherein the transmission output is reduced upon turning-on of an authentication button provided on said particular one of said portable radio devices (Nealon: Col 8, lines 23-34).

20       As per claims 5 and 13, the applicant describes the authenticating method of claims 1 and 9, which are met by Nealon in view of Leon in further view of Executive Council, with the following limitation which is met by Nealon:

Wherein the step of performing the authentication by said authenticating means is performed in a state where reception sensitivity of said radio device is reduced to shorten a communication distance of  
25 said radio devices (Nealon: Col 8, lines 23-34).

Art Unit: 2137

As per claims 7 and 15, the applicant describes the authenticating method of claims 5 and 13, which are met by Nealon in view of Leon in further view of Executive Council, with the following limitation which is met by Cotton:

Wherein the reception sensitivity is reduced upon turning-on of an authentication button provided  
5 on said particular one of said portable radio devices (Nealon: Col 8, lines 23-34).

Claims 3,6,11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nealon in view of Leon in further view of Addy, U.S. Patent No. 6,288,639, in further view of Executive Council.

10 As per claims 3,6,11, and 14, the Applicant describes an authenticating method comprising the following steps which are met by Nealon, Leon, Addy, and Executive Council:

a) switching coverage area of a portable radio device to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area (Nealon: Col 8, lines 23-34; Leon: Col 5, lines 58-64);

15 b) bringing the two or more portable radio devices to be mutually authenticated having the second coverage area to within a proximity of one another so that the coverage areas of the two or more portable radio devices overlap (Nealon: Col 8, lines 23-34; Leon: Col 5, lines 58-64; Executive Council: page 22);

c) performing mutual authentication between the two or more portable radio devices by said authenticating means automatically when the coverage area of the two or more portable radio devices  
20 overlap (Leon: Col 5, lines 58-64);

d) preventing communication with an unintentional portable radio device by narrowing the coverage area of the two or more portable radio devices before mutual authentication initiates based on the proximity of the two or more portable radio devices (Nealon: Col 8, lines 23-34);

e) wherein a transmission output of only a particular one of said portable radio devices is reduced  
25 to shorten a communication distance of said portable radio devices (Addy: Col 2, lines 58-64)

Nealon teaches switching coverage area of a portable radio device to a second coverage area, the second coverage area being smaller than the first coverage area, bringing two or more radio devices

Art Unit: 2137

having a second coverage area to within a proximity of one another so that the coverage areas overlap, performing authentication between the two radio devices, and preventing communication with an unintentional portable radio device by narrowing the coverage area of the two devices.

However, Nealon appears to fail to disclose that mutual authentication takes place. Leon  
5 discloses the idea that when two devices are brought to within a predetermined vicinity, mutual authentication automatically executes. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Leon with those of Nealon for at least the reason that doing so makes the system more robust through authentication of both entities involved in the communication.

10 Nealon in view of Leon disclose communication between a portable device and a base station. Nealon and Leon, however, appear to be silent as to whether the base station is portable. Executive Council discloses the idea that a radio base station may be portable. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Executive Council with those of Nealon in view of Leon because having a portable base station allows the base station to be  
15 more versatile as it can be moved around the room to provide the most efficient communication between itself and the portable device(s).

Nealon in view of Leon in further view of Executive Council appear to disclose reducing transmission output between both devices. Addy discloses that during a registration process only one device may reduce transmission output. It would have been obvious to one of ordinary skill in the art at  
20 the time the invention was filed to combine the ideas of Addy with those of Nealon in view of Leon in further view of Executive Council for at least the reason that doing so reduces complexity required in the system and may allow use with a legacy device.

Claims 3,6,11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nealon in  
25 view of Leon in further view of Cotton, U.S. Patent No. 6,148,205, in further view of Executive Council.



Art Unit: 2137

As per claims 3,6,11, and 14, the Applicant describes an authenticating method comprising the following steps which are met by Nealon, Leon, Cotton, and Executive Council:

a) switching coverage area of a portable radio device to be mutually authenticated from the first coverage area to the second coverage area, the second coverage area being smaller than the first coverage area (Nealon: Col 8, lines 23-34; Leon: Col 5, lines 58-64);

b) bringing the two or more portable radio devices to be mutually authenticated having the second coverage area to within a proximity of one another so that the coverage areas of the two or more portable radio devices overlap (Nealon: Col 8, lines 23-34; Leon: Col 5, lines 58-64; Executive Council: page 22);

c) performing mutual authentication between the two or more portable radio devices by said authenticating means automatically when the coverage area of the two or more portable radio devices overlap (Leon: Col 5, lines 58-64);

d) preventing communication with an unintentional portable radio device by narrowing the coverage area of the two or more portable radio devices before mutual authentication initiates based on the proximity of the two or more portable radio devices (Nealon: Col 8, lines 23-34);

e) wherein the reception sensitivity of only a particular one of said portable radio devices is reduced to shorten a communication distance of said portable radio devices (Cotton: Col 5, lines 25-31)

Nealon teaches switching coverage area of a portable radio device to a second coverage area, the second coverage area being smaller than the first coverage area, bringing two or more radio devices having a second coverage area to within a proximity of one another so that the coverage areas overlap, performing authentication between the two radio devices, and preventing communication with an unintentional portable radio device by narrowing the coverage area of the two devices.

However, Nealon appears to fail to disclose that mutual authentication takes place. Leon discloses the idea that when two devices are brought to within a predetermined vicinity, mutual authentication automatically executes. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Leon with those of Nealon for at least the reason that doing so makes the system more robust through authentication of both entities involved in the communication.

Art Unit: 2137

Nealon in view of Leon disclose communication between a portable device and a base station. Nealon and Leon, however, appear to be silent as to whether the base station is portable. Executive Council discloses the idea that a radio base station may be portable. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Executive Council with those of Nealon in view of Leon because having a portable base station allows the base station to be more versatile as it can be moved around the room to provide the most efficient communication between itself and the portable device(s).

Nealon in view of Leon in further view of Executive Council appear to disclose reducing reception sensitivity in both a base unit and a second unit. Cotton discloses the idea that the reception sensitivity in a second unit need not be reduced. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Cotton with those of Nealon in view of Leon in further view of Executive Council because doing so allows the second unit the opportunity to have normal reception sensitivity during a registration process, so that, for one example, it may not lose calls.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should  
5 you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10 KS

  
**EMMANUEL L. MOISE**  
**SUPERVISORY PATENT EXAMINER**